



## REMARKS

Reconsideration of the above-identified application is respectfully requested. Claims 1-31 and 58 are presently pending in this application subsequent to entry of the above amendments. Claims 32-57 have been cancelled without prejudice to their prosecution in a subsequent application pursuant to a restriction requirement. Claims 5-9 and 17 have been amended to correct an incorrect dependency; each should have depended from claim 4, not claim 1, as indicated by their reference to certain elements recited in claim 4 but not claim 1. Claim 14 has been amended to correct an incorrect dependency to avoid multiple-multiple dependency. No other claims have been amended, added or canceled. Thus, no new matter has been added.

### **The Restriction Requirement**

The Office Action noted the previous Restriction Requirement and stated that it was being maintained so only the elected claims would be examined (the Office Action wrote 1-34 and 58 at times, but this appears to have been a typographical error; Applicants assume that the correct numbers are claims 1-31 and 58). Accordingly, to facilitate matters, with traverse Applicants have cancelled claims 32-57 without prejudice to their prosecution in a subsequent application.

### **The Rejections Under 35 U.S.C. § 103 On The Basis Of Obviousness**

The Office Action rejected claims 1-31 and 58, under 35 U.S.C. § 103(a) as assertedly obvious over Clark, United States Patent No. 6,369,883 (Clark) in view of Rosow, United States Patent No. 5,953,112 (Rosow). The Office Action rejected the claims in groups. Accordingly, after a couple of traversal comments that affect all claims, the rejections will be discussed in the order presented in the Office Action (of course, traversals relating to base claims relate to all depending claims, too).

### **Traversals that apply for all claims**

Clark, the primary reference, was filed on April 13, 2000, which is well after the September 17, 1999, priority date for the present application (*i.e.*, the filing date of the provisional application preceding the present application). This means that

Clark is not prior art. Nevertheless, Applicants will also respond on the merits because even if Clark were prior art, it simply does not render the claims nonobvious.

Further, there is no teaching, suggestion or motivation to combine Clark and Rosow. For example, Clark relates to testing for power loss from splicing fiber bundles in the telecommunications industry, which, as indicated at column 1, lines 14-15, relates primarily to infrared light. In contrast, Rosow relates to the testing a wide variety of light wavelengths, from UV to IR, so concepts from the one reference would not necessarily apply to the other, and vice-versa. In other words, each might teach some elements of the claimed invention (although not all elements, as discussed further below), but there is nothing in either reference suggesting their combination. The law is well-established that the impetus for combining references must be found in the references themselves, not the pending patent application. *See, e.g., Orthopedic Equip. Co. v. United States*, 217 U.S.P.Q. 193, 199 (Fed. Cir. 1983) ("It is wrong to use [the patent application] as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims [at issue]. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in [the PTO].").

#### **Claims 1 and 58**

Briefly, the Office Action asserted that Clark discloses a measurement system for testing a plurality of optical fibers in which the optical fibers are optically coupled to an integrating sphere using a fiber holder and an adapter. The Office Action noted that Clark does not explicitly teach that endoscopes are tested, but then asserted that such a feature is taught in Rosow, which is assertedly directed to a photometric measurement system used to test the performance characteristics of fiber-optic endoscopes, including the light loss test, a lighted fibers test, or MTF test. The Office Action then asserted that it would have been obvious at the time the presently claimed invention was made to use the basic device of Clark to test the optical fibers of endoscopes as taught by Rosow because the device would function in the same manner.

Applicants respectfully traverse the rejection.

The proposed combination does not teach or suggest each and every element of the claimed invention; even if combined as proposed the claims would still be patentable because they recite elements not mentioned in either references. For

example, there is no mention of the claimed "at least one adapter able to optically connect the integrating sphere to a plurality of different optical ports of different endoscopes."

The proposed combination would not be expected to be operable. Rosow uses an image-based test whereas Clark is directed to determining the light characteristics at the splice point of adjacent fiber bundles; there is no image at such a point (if there were then the integrating sphere of Clark would destroy the image). Thus, the methods of Rosow would not work in combination with the integrating sphere of Clark. Further, the optical fibers in an endoscope are a bundle that cannot be separated in the manner set forth in Clark. (Note, each of these factors also demonstrate the inappropriateness of the overall combination of Clark and Rosow, discussed above.)

#### **Claims 2 and 23**

The Office Action asserted that Clark teaches the use of a lamp or other light source (citing to col. 9, ll. 64-66) and Rosow teach the use of an arc lamp, halogen bulb or variable xenon short-arc lamp (citing to col. 5, ll. 17-29).

Applicants respectfully traverse the rejection.

Applicants do not dispute the assertion that Clark and Rosow teach the use of various lamps/light sources.

However, claim 2 is directed to "the data [being] measured over a plurality of discrete wavelengths or wavelength regions" and the various lamps do not necessarily refer to such measurement. Neither Clark nor Rosow teaches or suggests measurement over a plurality of discrete wavelengths.

Also, claim 23 requires "an illumination integrating sphere optically connected to the illumination light source." Neither Clark nor Rosow teaches or suggests an illumination integrating sphere.

#### **Claims 3-4**

The Office Action asserted that Clark teaches the use of an adaptor (405) for coupling the fiber holder with the integrating sphere (citing to col. 10, ll. 6-8) and the adaptors and holders (501) may have differing size and structure for receiving different sized fibers (citing to col. 9, ll. 51-62).

Applicants respectfully traverse the rejection.

Claim 3 requires an "image quality measurement module" and claim 4 requires an "structural element measurement module." There is nothing in Clark related to either element. Rather, Clark is directed solely to measuring power loss, and the the fiber bundles in Clark do not transmit images so they can't be related to an image quality measurement module, and there is simply nothing in Clark (or Rosow) about a structural element measurement module. In addition, regarding the assertion from the Office Action about the adaptor, it appears that Clark, *see, e.g.*, col. 9, lines 51-62, relates to differing splicers and fiber holders, not differing adaptors on the integrating sphere. The multiple adapters are for the fusion splicer, a device for melting optical fibers together to create a splice by fusing them.

#### **Claims 5-7 and 17**

The Office Action asserted that Rosow (citing to col. 5, ll. 30-47) teaches an image quality measurement module.

Applicants respectfully traverse the rejection. Before addressing the merits of the rejections, however, Applicants note that Claims 5-7 and 17 have been amended to correct an incorrect dependency; each should have depended from claim 4, not claim 1, as indicated by their reference to certain elements recited in claim 4 but not claim 1.

Turning to the merits, Applicants do not dispute that Rosow shows an "image quality measurement module." However, the rejected claims, 5-7 and 17, also require a structural element module, which is not mentioned any where in Rosow.

#### **Claims 8-16 and 18**

The Office Action asserted that Clark teaches that the light meter may be calibrated (citing to col. 10, ll. 33-34) and thus it would be obvious to use different methods of calibration such as those in claims 8-16.

Applicants respectfully traverse the rejection. Before addressing the merits of the rejections, however, Applicants note that Claims 8 and 9 have been amended to correct an incorrect dependency; each should have depended from claim 4, not claim 1, as indicated by their reference to certain elements recited in claim 4 but not claim 1.

Turning to the merits, there simply is no mention in Clark of the various elements in the rejected claims. The Office Action must give a specific indication of the recited elements in Clark, not a general comment that different things are obvious because they can be generally categorized. This is particularly true when the cited reference is not testing the same sort of devices as claimed. Applicants could find no mention in Clark of the claimed elements. If the Examiner is aware of any such recitation, Applicants respectfully request that they be pointed out so that Applicant can assess them and acquiesce or reply.

#### **Claim 19**

The Office Action asserted that it would have been an obvious matter of design choice to modify Rosow to include a pressure transducer and flow meter to transfer gas, liquid or vacuum between the structural element measurement module and the endoscopes to improve the quality of the measurement.

Applicants respectfully traverse the rejection.

As in the previous response, there must be a specific indication of the recited elements in Rosow, not a general assertion by the Office Action of a possible design choice. This is particularly relevant here since claim 19 is directed to the structural element measurement module yet there simply is no structural element measurement module in Rosow. Since there is no such module in Rosow, it cannot be obvious to modify it as claimed.

#### **Claim 20**

The Office Action asserted that it would have been obvious to replace the photometer of Rosow or the light meter of Clark with a spectrometer "if one would like to measure different characteristics, such as color or appearance, of a sample."

Applicants respectfully traverse the rejection.

There is no mention in either Clark or Rosow of the measurement and analysis of different color characteristics. There must be specific indication of the claimed elements in the references, not a vague assertion of what might be found "if" one wanted to create the claimed invention.

#### **Claims 21-22 and 25-26**

The Office Action asserted that Clark teaches that the adapter may be fixed or detachable from the integrating sphere.

Applicants respectfully traverse the rejection.

As discussed above, Clark teaches changeable adaptors for the splicers and fiber holders, not the integrating spheres. Thus, Clark does not teach or suggest the claimed invention.

#### **Claim 24**

The Office Action asserted that Figure 3 of Clark teaches that the fiber (403) is connected between the light source and the integrating sphere.

Applicants respectfully traverse the rejection.

Applicants respectfully submit that claim 24 is directed to "an illumination integrating sphere optically connected to the illumination light source." There is nothing in Clark regarding an illumination integrating sphere, nor to one connected to the illumination light source.

#### **Claims 27-29**

The Office Action asserted that Rosow (citing to col. 19, lines 40-51) teaches a scanning CCD camera.

Applicants respectfully traverse the rejection.

Rosow does not teach a scanning CCD camera. The CCD camera in Rosow is a 2-dimensional camera, not a scanning camera. Such a 2-dimensional camera is also known as a "staring array" rather than a scanning line. It is not a linear CCD.

#### **Claims 30-31**

The Office Action asserted, without citation to any reference or reason, that it would have been obvious to rotate the endoscopes relative to the sensor if additional measurement is desired.

Applicants respectfully traverse the rejection.

Simply, there is no mention in the references of "conjugate image plane of the endoscope can be translated or rotated relative to the linearly arrayed sensing element to make one or more measurements in the conjugate image plane" as

recited in claim 30. Rosow, column 6, lines 27 – 32, and Figs. 2-3, indicates that the mounting arm 14 holding the endoscope under test is "pivotally coupled to the arm support 38 and the angular position of the arm [14] is adjustable relative to the carrier support 40 in order to accommodate endoscopes of all possible tip angles." However, this is a different structure and different purpose from the claimed matter.

Further, there simply is no mention in either reference of "the computer-implemented programming can reconstruct a sequence measurements of in the conjugate image plane to create a two-dimensional digital image of the conjugate image plane" as recited in claim 31.

For the foregoing reasons, Applicant respectfully submits that each of the rejections has been traversed and should be withdrawn.

Applicant respectfully submits the application is in compliance with 35 U.S.C. § 101 *et. seq.* Thus, Applicants respectfully request allowance of all pending claims, 1-31 and 58xxx. Applicants have made a good faith effort to place this application in condition for allowance. However, should the Office Action have any further questions about the application, for example the particular language in the claims, Applicants respectfully request the Office Action to contact the undersigned attorney at (425) 455-5575 to resolve the matter. A check is included herewith to pay for the additional claims. If any need for any additional fee is found, for any reason, kindly this a petition therefore and charge any necessary fees to Deposit Account 07-1897.

DATED this 10th day of September, 2003.

Respectfully submitted,

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